

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended): A process for the continuous preparation of a composition comprising silica in a furnace comprising at least two tanks in series, said process comprising introducing most of the silica and at least one fluxing agent for the silica into a first tank comprising at least one submerged burner, melting most of the silica in the first tank, [[and]] transferring the silica to a second tank comprising at least one submerged burner, and introducing into the second tank at least one thinner or at least one metal oxide, wherein the first tank is heated to a higher temperature than the other tank(s) of the furnace, [[and]] the temperature difference between the first tank and the other tank or tanks is at least 80°C, the first tank is heated to a temperature ranging from 1000 to 1350°C, and the other tank or tanks are heated to a temperature of at most 1150°C.

2. (Previously Presented): The process as claimed in claim 1, wherein at least 90% of the silica and at least 90% of the fluxing agent for the silica are introduced into the first tank.

3. (Previously Presented): The process as claimed in claim 2, wherein the furnace is fed with a thinner, at least 90% of which is introduced into the second tank of the furnace.

4-5. (Canceled).

6. (Currently Amended): The process as claimed in claim 5, wherein the first tank is heated to a temperature ranging from 1230 to 1350°C, ~~and the other tank or tanks are heated to a temperature of at most 1150°C.~~

7. (Previously Presented): The process as claimed in claim 1, wherein the composition comprises 10 to 70% SiO_2 , by weight, 0.3 to 30% Na_2O , by weight, 5 to 30% B_2O_3 , by weight, and 0.3 to 35%, by weight, of at least one additional oxide of a metal.

8. (Previously Presented): The process as claimed in claim 7, wherein the final composition is a frit, comprising 40 to 70% SiO_2 , by weight, 20 to 30% Na_2O , by weight, 5 to 15% B_2O_3 , by weight, and 3 to 20%, by weight, of at least one additional oxide of a metal.

9. (Previously Presented): The process as claimed in claim 7, wherein the metal is selected from the group consisting of chromium, cobalt, copper, nickel, selenium, zirconium, titanium, manganese, praseodymium, iron and zinc.

10. (Previously Presented): The process as claimed in claim 1, wherein at least one oxide of a metal is introduced into the second tank of the furnace.

11. (Previously Presented): The process as claimed in claim 10, wherein the furnace comprises at least three tanks in series, the second being heated to a temperature ranging from 1000° to 1150°C , and the third to a temperature ranging from 900° to 1000°C .

12. (Previously Presented): The process as claimed in claim 11, wherein the oxide has several oxidation states, and the submerged burner(s) of the third tank has/have a sufficiently oxidizing flame for the oxidation state of the oxide to be raised on going, from the second to the third tank.

13. (Previously Presented): The process as claimed in claim 1, wherein the composition is a color frit or a tile frit or an enamel.

14. (Withdrawn): A tile frit, obtained by the process of claim 1.

15. (Withdrawn): A furnace for the continuous melting of a composition comprising silica, said furnace comprising at least three tanks in series, said tanks each comprising at least one burner submerged in a melt.

16. (Canceled).

17. (Withdrawn): The furnace as claimed in claim 15, wherein two of the tanks each comprise separate charging means.

18. (Withdrawn): A plant for the preparation of glass compositions, comprising the furnace of claim 15, followed by a feeder or a fining zone.

19. (Currently Amended): A process for the continuous preparation of a composition comprising silica in a furnace comprising at least two tanks in series, said tanks each comprising at least one burner submerged in the melt, said process comprising introducing most of the silica in the form of grains and at least one fluxing agent into the first tank, melting most of the silica and fluxing agent in the first tank to form molten silica, [[and]] transferring the molten silica to a second tank, and introducing into the second tank at least one thinner or at least one metal oxide, wherein the first tank is heated to a higher temperature than the other tank(s) of the furnace, the first tank is heated to a temperature

ranging from 1000 to 1350°C, and the other tank or tanks are heated to a temperature of at most 1150°C.

20. (Previously Presented): The process as claimed in claim 19, wherein at least 90% of the silica and at least 90% of the fluxing agent for the silica are introduced into the first tank.

21. (Previously Presented): The process as claimed in claim 20, wherein the furnace is fed with a thinner, at least 90% of which is introduced into the second tank of the furnace.

22. (Previously Presented): The process as claimed in claim 19, wherein the temperature difference between the first tank and the other tank or tanks is at least 80°C.

23. (Currently Amended): The process as claimed in claim 22, wherein the first tank is heated to a temperature ranging from 1230 to 1350°C, ~~and the other tank or tanks are heated to a temperature of at most 1150°C.~~

24. (Previously Presented): The process as claimed in claim 19, wherein the composition comprises 10 to 70% SiO₂, by weight, 0.3 to 30% Na₂O, by weight, 5 to 30% B₂O₃, by weight, and 0.3 to 35%, by weight, of at least one additional oxide of a metal.

25. (Previously Presented): The process as claimed in claim 24, wherein the final composition is a frit, comprising 40 to 70% SiO₂, by weight, 20 to 30% Na₂O, by weight, 5 to 15% B₂O₃, by weight, and 3 to 20%, by weight, of at least one additional oxide of a metal.

26. (Previously Presented): The process as claimed in claim 24, wherein the metal is selected from the group consisting of chromium, cobalt, copper, nickel, selenium, zirconium, titanium, manganese, praseodymium, iron and zinc.

27. (Previously Presented): The process as claimed in claim 19, wherein at least one oxide of a metal is introduced into the second tank of the furnace.

28. (Previously Presented): The process as claimed in claim 27, wherein the furnace comprises at least three tanks in series, the second being heated to a temperature ranging from 1000° to 1150°C, and the third to a temperature ranging from 900° to 1000°C.

29. (Previously Presented): The process as claimed in claim 28, wherein the oxide has several oxidation states, and the submerged burner(s) of the third tank has/have a sufficiently oxidizing flame for the oxidation state of the oxide to be raised on going, from the second to the third tank.

30. (Previously Presented): The process as claimed in claim 19, wherein the composition is a color frit or a tile frit or an enamel.

31. (Previously Presented): The process as claimed in claim 19, wherein said furnace comprises at least three tanks in series and each tank comprises at least one submerged burner.

32. (New): A process for the continuous preparation of a composition comprising silica in a furnace comprising at least two tanks in series, said process comprising introducing most of the silica and at least one fluxing agent for the silica into a first tank comprising at least one submerged burner, melting most of the silica in the first tank, transferring the silica to a second tank comprising at least one submerged burner, and introducing into the second tank at least one oxide selected from the group consisting of boron oxide, zinc oxide and selenium oxide, wherein the first tank is heated to a higher temperature than the other tank(s) of the furnace, the temperature difference between the first tank and the other tank or tanks is at least 80°C, the first tank is heated to a temperature ranging from 1000 to 1350°C, and the other tank or tanks are heated to a temperature of at most 1150°C, and wherein the composition comprises 10 to 70% SiO₂, by weight, 0.3 to 30% Na₂O, by weight, 5 to 30% B₂O₃, by weight, and 0.3 to 35%, by weight, of at least one additional oxide of a metal.

33. (New): The process as claimed in claim 1, further comprising conveying the composition comprising silica from the furnace to a radiation-heated feeder.

34. (New): The process as claimed in claim 32, further comprising conveying the composition comprising silica from the furnace to a radiation-heated feeder.

35. (New): The process as claimed in claim 1, further comprising conveying the composition comprising silica from the furnace to a fining zone.

36. (New): The process as claimed in claim 32, further comprising conveying the composition comprising silica from the furnace to a fining zone.